

Correspondence

Save Caatinga from drought disaster

Brazil's semi-arid Caatinga scrub forest is experiencing its worst drought in 30 years, with more than 300 settlements in the northeast at the point of collapse (see go.nature.com/pngjfq). The federal government must urgently address the drought's disastrous effects on livelihoods and on the survival of this biosphere reserve.

Whether natural fluctuations in temperature and rainfall or climate change are to blame, the lack of water is killing livestock and destroying crops. Pressure on Caatinga land is increasing as local people hunt wild animals for food and trade, often burning vast areas of vegetation to flush out their prey. We have seen native plants being used indiscriminately to fuel furnaces for brick production so that families can buy food and water from other regions of Brazil.

The plight of this stricken area is being largely ignored by the media and by the government. Human survival should no longer need to depend on the destruction of local biodiversity.

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In praise of open research measures

On behalf of the Data-Enabled Life Sciences Alliance (DELSA Global), we applaud the significant, timely steps *Nature* is taking to ensure reproducibility and transparency in life-sciences articles (*Nature* 496, 398; 2013 and go.nature.com/oloeip).

We discussed *Nature's* Reporting Checklist for Life Sciences at our annual workshop last month (see www.delsaglobal.org). By encouraging researchers to make their data and metadata available, and to clarify their

analysis methods, the checklist will help to prevent mistakes from being propagated and resources from being wasted on dead-end experiments.

This is important in an era of tight funding and limited training in the quantitative aspects of research, both of which inhibit confirmatory experimentation. In addressing the veracity of data as well as the reliability and reproducibility of research, *Nature's* checklist will stimulate the transformation of data into knowledge, action and outcomes.

Scientific advances need strong public support to make a difference, and your policies constitute an important step in preserving public trust in science. The checklist can act as a useful template for development by publishers, federal agencies, funders, research organizations, societies and communities.

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Curb China's rising food wastage

China is currently managing to feed its people (F. Zhang *et al.* *Nature* 497, 33–35; 2013), but food loss and waste throughout the supply chain must be taken into account if food security is to be maintained in the future.

Of China's grain output, an estimated 8%, 2.6% and 3% are lost during storage, processing and distribution, respectively — a total of some 35 million tonnes annually. As in many other developing countries, these alarming losses are a result of inadequate infrastructure, knowledge and technology, and are exacerbated by a decentralized agricultural production system.

China's increasing affluence is also leading to wide-scale food wastage. For example, household food waste totals roughly 2.5% of grain a year (around 5.5 million tonnes). This is fast approaching Western levels (see, for instance, go.nature.com/erZ4if).

The pattern and scale of food waste in China are still unclear:

more quantitative research will help to inform policy-making and to increase public awareness of the problem (see our pilot study at go.nature.com/8zq1je; in Chinese).

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Education: enticing students into science

Colin Macilwain argues that the United States would not need to spend US\$3 billion annually on a programme to encourage young people to pursue careers in science, technology, engineering and mathematics (STEM) if market forces were right (*Nature* 497, 289; 2013). But conditions and opportunities in science have not visibly improved for students in the past three decades.

Supplementary information to: In praise of open research measures

Full list of co-signatories to a Correspondence published in Nature **498**, 170 (2013);
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